

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/552,158A  
Source: IFWJ  
Date Processed by STIC: 8/8/06

***ENTERED***



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/552,158A

DATE: 08/08/2006

TIME: 08:29:23

Input Set : A:\Xenon 154.txt  
 Output Set: N:\CRF4\08082006\J552158A.raw

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4 <110> APPLICANT: Xenon Genetics Inc.
6 <120> TITLE OF INVENTION: Juvenile Hemochromatosis Gene (HFE2A), Expression Products
7 and Uses Thereof
9 <130> FILE REFERENCE: 760050-134
11 <140> CURRENT APPLICATION NUMBER: 10/552,158A
12 <141> CURRENT FILING DATE: 2005-10-12
14 <150> PRIOR APPLICATION NUMBER: 60/461,615
15 <151> PRIOR FILING DATE: 2003-04-09
17 <150> PRIOR APPLICATION NUMBER: 60/462,867
18 <151> PRIOR FILING DATE: 2003-04-15
20 <150> PRIOR APPLICATION NUMBER: 60/488,607
21 <151> PRIOR FILING DATE: 2003-07-18
23 <150> PRIOR APPLICATION NUMBER: 60/498,458
24 <151> PRIOR FILING DATE: 2003-08-28
26 <160> NUMBER OF SEQ ID NOS: 62
28 <170> SOFTWARE: PatentIn version 3.0
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31 <211> LENGTH: 149
32 <212> TYPE: DNA
33 <213> ORGANISM: Homo sapiens
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41 <210> SEQ ID NO: 2
42 <211> LENGTH: 204
43 <212> TYPE: DNA
44 <213> ORGANISM: Homo sapiens
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49 gccagtcccc tagtcccagg tcctcccatg gcagtcccc aactctaagc actctcactc 180
50 tcctgctgct cctctgtgga catg 204
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54 <211> LENGTH: 37
55 <212> TYPE: DNA
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58 <400> SEQUENCE: 3
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62 <211> LENGTH: 560
63 <212> TYPE: DNA
64 <213> ORGANISM: Homo sapiens

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67	ctcattctca	atgcaagatc	ctccgctgca	atgctgagta	cgtatcgccc	actctgagcc	60
68	tttagagggtgg	gggttcatca	ggagcaccc	gaggaggagg	aggaggaggc	cgggggtggag	120
69	gggtgggctc	tggcgccctc	tgtcgagccc	tccgctccta	tgcgctctgc	actcgccgca	180
70	ccgccccgac	ctgcccgggg	gacctcgcc	tccatcgcc	ggtacatggc	atcgaagacc	240
71	tgtatgatcca	gcacaactgc	tcccggccagg	gccctacagc	ccctcccccc	ccccggggcc	300
72	ccgccccctcc	aggcgccggc	tccggccctc	ctgccccgg	cccttgcac	tatgaaggcc	360
73	ggtttcccg	gctgcattgt	cgccccccgg	ggttcttgca	ttgcgcttcc	ttcggggacc	420
74	cccatgtgcg	cagctccac	catcaacttc	acacatgccg	tgtccaagg	gcttggcctc	480
75	tactggataa	tgacttcc	tttgtccaag	ccaccagctc	ccccatggcg	ttggggccca	540
76	acgctaccgc	cacccggaa					560

79 &lt;210&gt; SEQ ID NO: 5

80 &lt;211&gt; LENGTH: 1230

81 &lt;212&gt; TYPE: DNA

82 &lt;213&gt; ORGANISM: Homo sapiens

84 &lt;400&gt; SEQUENCE: 5

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86	gtggataatc	ttcctttagc	ctttgaagat	ggttcttatca	atggagggtg	ccgacactggg	120
87	ggatccagg	tgtcgattca	aactgcta	cctggaaacc	atgtggagat	ccaagctgcc	180
88	tacattggca	caactataat	cattcggcag	acagctggc	agctctc	ctccatcaag	240
89	gtagcagagg	atgtggccat	ggccttctca	gctgaacagg	acctgcagct	ctgtgttggg	300
90	gggtggccctc	caagtca	actctctcg	tcagagcg	atcgtcg	ggggagctataacc	360
91	attgatactg	ccagacgg	gtgcaaggaa	gggctccag	tggaaatgtc	ttacttccat	420
92	tcctgtgtct	ttgatgttt	aatttctgg	gatccaa	acttaccgtgg	agctcaggca	480
93	gca	atgcccgg	cttcctgcca	gacttagaga	agctgc	atcttccctca	540
94	gatgctgggg	ttcctttt	ctcagcaacc	ctcttagctc	cactc	cttcccttc	600
95	gttctgtggc	tttgcattca	gtaaggggac	catcagtccc	attactat	tggaaatgt	660
96	ttggagatac	agattggc	ataagaatgt	aaagaatcat	taaaggaagc	agggcctagg	720
97	agacacgtga	aacaatgaca	ttatccagag	tcagatgagg	ctgcagt	ccaaatgtaaaat	780
98	tatcacagaa	taaggattct	ggcaagggt	actgcattcc	ggatctctgt	ggggcttcc	840
99	accaattttt	ccagcctcat	ttatagtaaa	caaattgttc	taatccatt	actgcagatt	900
100	tcacccttat	aagttagag	gtcatgaagg	ttttaatgt	cagtaaagat	ttaagggtt	960
101	agattttaa	gaggcaagag	ctgaaagc	aagacatgt	cattagccat	aagaaactca	1020
102	aaggaggaag	acataattag	gaaagaagt	ctatttgat	aatatgtgt	tgtaaaggat	1080
103	gttctgtttt	cttgattcaa	aatgaagca	ggcattgtct	agctttagg	tgaaggag	1140
104	ctctgtttt	gaagaatggc	acaggttag	cagaagtatc	atccctaccc	cctaactaat	1200
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108 &lt;210&gt; SEQ ID NO: 6

109 &lt;211&gt; LENGTH: 1379

110 &lt;212&gt; TYPE: DNA

111 &lt;213&gt; ORGANISM: Homo sapiens

113 &lt;400&gt; SEQUENCE: 6

114	cttctctgg	tccctgac	cagtgc	gac	gcagccggcc	tggggac	60
115	ggaggacccc	ctggctgg	ctgaccc	caca	gagtagggaa	tcatggctgg	120
116	acagagat	tgttgc	ctggaa	acac	tcaccatcat	atthaagaa	180
117	gcattgatca	gaagggt	gtat	caggctgagg	tggataatct	tcctgtagcc	240
118	gttctatcaa	tggaggt	gac	ctgggg	gatccagttt	gtcgattcaa	300
119	ctgggaacca	tgtggagatc	caagctg	cct	acatggc	aactataatc	360
120	cagctgg	gca	gct	tccttc	tccatcaagg	tagcagagga	420
						gccttctcag	

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121	ctgaacagga	cctgcagctc	tgtgtgggg	ggtgccctcc	aagtca	cgca	ctctctcgat	480
122	cagagcgc	caa tcgtcg	gggta	acc	ttgata	ctgc	cagacggctg	540
123	ggcttc	aggatgt	tacttccatt	cctgtgtctt	tgatgttta	atttctgg	tgcaaggaa	600
124	atccca	actt	ccat	cttcc	atgt	gggt	cccgc	660
125	acttagagaa	gctgc	atctc	ttccc	atgt	gggt	tcc	720
126	tcttagctcc	actcc	tttct	gggc	ctt	ttc	tgcattc	780
127	atcag	tccca	ttact	atgtt	ggaa	atgatt	tg	840
128	aagaatcatt	aaaggaa	agca	gggc	c	tttt	gat	900
129	cagatgaggc	tgc	agtc	gtt	gaa	att	atc	960
130	ctgcattccg	gat	ctctgt	gggc	ctt	ttc	cag	1020
131	aaattgttct	aat	ccattt	ctgc	agat	ttt	catt	1080
132	ttt	aatgat	atgtt	taagg	gtt	ttt	agg	1140
133	agacatgatc	at	tagccata	agaa	actcaa	agg	gaa	1200
134	tattt	gtat	atatgtgt	gt	aggat	ttt	ttg	1260
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147	ac	agat	gaa	ttt	ttt	ttt	ttt	180
148	tgt	ctgact	act	cat	at	aa	acat	240
149	gtc	gagg	gtt	ttt	ttt	ttt	ttt	300
150	cct	gggg	gg	gg	gg	gg	gg	360
151	gtc	cct	aca	ac	ttt	ttt	ttt	420
152	at	caagg	at	ttt	ttt	ttt	ttt	480
153	gtt	gggg	gg	gg	gg	gg	gg	540
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155	ttc	catt	ttt	ttt	ttt	ttt	ttt	660
156	cagg	cac	ttt	ttt	ttt	ttt	ttt	720
157	cc	c	ttt	ttt	ttt	ttt	ttt	780
158	ctt	ttt	ttt	ttt	ttt	ttt	ttt	840
159	aat	gat	ttt	ttt	ttt	ttt	ttt	900
160	cct	tag	ttt	ttt	ttt	ttt	ttt	960
161	tga	aaatt	ttt	ttt	ttt	ttt	ttt	1020
162	ctt	ttt	ttt	ttt	ttt	ttt	ttt	1080
163	cag	at	ttt	ttt	ttt	ttt	ttt	1140
164	gg	ttt	ttt	ttt	ttt	ttt	ttt	1200
165	aact	caa	agg	ttt	ttt	ttt	ttt	1260
166	agg	ttt	ttt	ttt	ttt	ttt	ttt	1320
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173	<212>	TYPE:	DNA					
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176 &lt;400&gt; SEQUENCE: 8

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179	agcagagtaa	tgtttgcact	ctggaaacac	tcattctcaa	tgcaagatcc	tccgctgcaa	180
180	tgctgagta	gtatcgcca	ctctgagcct	tagaggtggg	ggttcatcag	gagcacttcg	240
181	aggaggagga	ggaggaggcc	ggggtggagg	ggtggctct	ggcggccctct	gtcgagccct	300
182	ccgctcctat	gchgctcgca	ctcgccgcac	cgcccgacc	tgccgcgggg	acctcgccct	360
183	ccattcggcg	gtacatggca	tgcagaagact	gatgatccag	cacaactgct	cccgccaggg	420
184	ccctacagcc	cctccccccg	cccggggccc	cgcccttcca	ggcgcgggct	ccggcctccc	480
185	tgccccggac	ccttgcact	atgaaggccg	gtttcccg	ctgcatggtc	gtccccggg	540
186	gttcttgcat	tgcgttcct	tcggggaccc	ccatgtgcgc	agttccacc	atcactttca	600
187	cacatgccgt	gtccaaaggag	cttgcctct	actggataat	gacttcctct	ttgtccaagc	660
188	caccagctcc	cccatggcgt	tggggccaa	cgctaccgccc	accggaaagc	tcaccatcat	720
189	atttaagaac	atgcaggaat	gcattgatca	gaaggtgtat	caggctgagg	tggataatct	780
190	tcctgttagcc	tttgaagatg	gttctatcaa	tggaggtgac	cgacctgggg	gatccagtt	840
191	gtcgattcaa	actgctaacc	ctgggaacca	tgtggagatc	caagctgcct	acattggcac	900
192	aactataatc	attcgcaga	cagctggca	gctcttc	tccatcaagg	tagcagagga	960
193	tgtggccatg	gccttctcag	ctgaacagga	cctgcagctc	tgtgttgggg	gtgtccctcc	1020
194	aagtgcgcga	ctctctcgat	cagagcgcaa	tcgtcgggg	gctataacca	ttgatactgc	1080
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199	ttgcattcag	taaggggacc	atcagtc	ttactagttt	gaaatgatt	tggagataca	1380
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201	acaatgacat	tatccagagt	cagatgaggc	tgcagtccag	ggttgaatt	atcacagaat	1500
202	aaggattctg	ggcaaggta	ctgcattccg	gatctctgt	gggctcttca	ccaattttc	1560
203	cagcctcatt	tatagtaaac	aaattgttct	aatccattt	ctgcagattt	caccctata	1620
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206	cataattagg	gaaagaagtc	tatttgatga	atatgtgt	gtaaggtatg	ttctgcttc	1800
207	ttgattcaaa	aatgaagcag	gcattgtcta	gctcttaggt	gaagggagtc	tctgctttg	1860
208	aagaatggca	cagtaggac	agaagtata	tccctacccc	ctaacta	tgttattaaa	1920
209	gtcacaattt	cttcacacc					1939

212 &lt;210&gt; SEQ ID NO: 9

213 &lt;211&gt; LENGTH: 2143

214 &lt;212&gt; TYPE: DNA

215 &lt;213&gt; ORGANISM: Homo sapiens

217 &lt;400&gt; SEQUENCE: 9

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220	agcagagtaa	tgtttgcact	ctggaaacac	caaatttctt	tttcagtc	cttacaggc	180
221	ttccggtcaa	aattactag	gtaggaggt	catcagctgg	gaagaaccgg	cgccctggaa	240
222	acgtggctgg	ataggtatgg	gggagccagg	ccagtc	agtcccaggt	cctccatgg	300
223	cagtccccca	actctaagca	ctctcactct	cctgcgtc	ctctgtggac	atgctcattc	360
224	tcaatgc	atcctccgt	gcaatgt	gtacgtatc	tccactctga	gccttagagg	420
225	tgggggttca	tcaggagcac	ttcgaggagg	aggaggagga	ggccgggg	gaggggtggg	480
226	ctctggccgc	ctctgtcgag	ccctccgtc	ctatgcgtc	tgcactggc	gcaccgcccc	540
227	cacctgcccgc	ggggacctcg	ccttcattc	ggcgtacat	ggcatcgaag	acctgtat	600

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230	ccggctgcat	ggtcgtcccc	cggggttctt	gcattgcgt	tccttcgggg	acccccattgt	780
231	gcccagcttc	caccatcaact	ttcacacatg	ccgtgtccaa	ggagcttggc	ctctactgga	840
232	taatgacttc	ctctttgtcc	aagccaccag	ctccccatg	gcgttggggg	ccaacgctac	900
233	cgccacccgg	aagctcacca	tcataattaa	gaacatgcag	aatgcattg	atcagaaggt	960
234	gtatcaggct	gagggtggata	atcttcctgt	agccttgaa	gatggttcta	tcaatggagg	1020
235	tgaccgacct	gggggatcca	gtttgtcgat	tcaaactgct	aaccctggga	accatgtgga	1080
236	gatccaagct	gcctacattt	gcacaactat	aatcattcgg	cagacagctg	ggcagctctc	1140
237	cttctccatc	aaggtagcag	aggatgtgac	catggccttc	tcagctgaac	aggacctgca	1200
238	gctctgtgtt	gggggggtgcc	ctccaagtca	gcgactctct	cgatcagac	gcaatcgtcg	1260
239	gggagctata	accattgata	ctgccagacg	gctgtgcaag	gaagggcttc	cagtggaaaga	1320
240	tgtttaacttc	cattcctgtg	tctttgtatgt	tttaatttct	ggtgatccca	actttaccgt	1380
241	ggcagctcag	gcagcactgg	aggatgccc	agccttcctg	ccagacttag	agaagctgca	1440
242	tctcttcccc	tcagatgctg	gggttcctct	ttcctcagca	accctcttag	ctccactcct	1500
243	tctcgggctc	tttgttctgt	ggctttcgat	tcagtaaggg	gaccatcagt	cccattacta	1560
244	gttggaaat	gatttgaga	tacagattgg	catagaagaa	tgtaaagaat	cattaaagga	1620
245	agcagggcc	aggagacacg	tgaaacaatg	acattatcca	gagtcaatg	aggctgcagt	1680
246	ccagggttga	aattatcaca	gaataaggat	tctggcaag	gttactgcat	tccggatctc	1740
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248	tttactgcag	atttccccct	tataagttt	gaggtcatga	aggttttaat	gatcagtaaa	1860
249	gatttaaggg	ttgagatttt	taagaggcaa	gagctgaaag	cagaagacat	gatcattagc	1920
250	cataagaaac	tcaaaggagg	aagacataat	taggaaaga	agtctattt	atgaatatgt	1980
251	gtgtgttaagg	tatgttctgc	tttcttgatt	caaaaatgaa	gcaggcattt	tctagctctt	2040
252	aggtgaaggg	agtctctgt	tttgaagaat	ggcacaggtt	ggacagaat	atcatcccta	2100
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256 &lt;210&gt; SEQ ID NO: 10

257 &lt;211&gt; LENGTH: 200

258 &lt;212&gt; TYPE: PRT

259 &lt;213&gt; ORGANISM: Homo sapiens

261 &lt;400&gt; SEQUENCE: 10

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263	1				5				10					15		
265	Leu	Pro	Val	Ala	Phe	Glu	Asp	Gly	Ser	Ile	Asn	Gly	Gly	Asp	Arg	Pro
266					20				25					30		
268	Gly	Gly	Ser	Ser	Leu	Ser	Ile	Gln	Thr	Ala	Asn	Pro	Gly	Asn	His	Val
269					35				40					45		
271	Glu	Ile	Gln	Ala	Ala	Tyr	Ile	Gly	Thr	Thr	Ile	Ile	Ile	Arg	Gln	Thr
272		50				55								60		
274	Ala	Gly	Gln	Leu	Ser	Phe	Ser	Ile	Lys	Val	Ala	Glu	Asp	Val	Ala	Met
275		65				70						75		80		
277	Ala	Phe	Ser	Ala	Glu	Gln	Asp	Leu	Gln	Leu	Cys	Val	Gly	Gly	Cys	Pro
278					85				90					95		
280	Pro	Ser	Gln	Arg	Leu	Ser	Arg	Ser	Glu	Arg	Asn	Arg	Arg	Gly	Ala	Ile
281					100				105					110		
283	Thr	Ile	Asp	Thr	Ala	Arg	Arg	Leu	Cys	Lys	Glu	Gly	Leu	Pro	Val	Glu
284		115				120								125		
286	Asp	Ala	Tyr	Phe	His	Ser	Cys	Val	Phe	Asp	Val	Leu	Ile	Ser	Gly	Asp
287		130				135								140		

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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

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Seq#:47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62

**VERIFICATION SUMMARY**

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